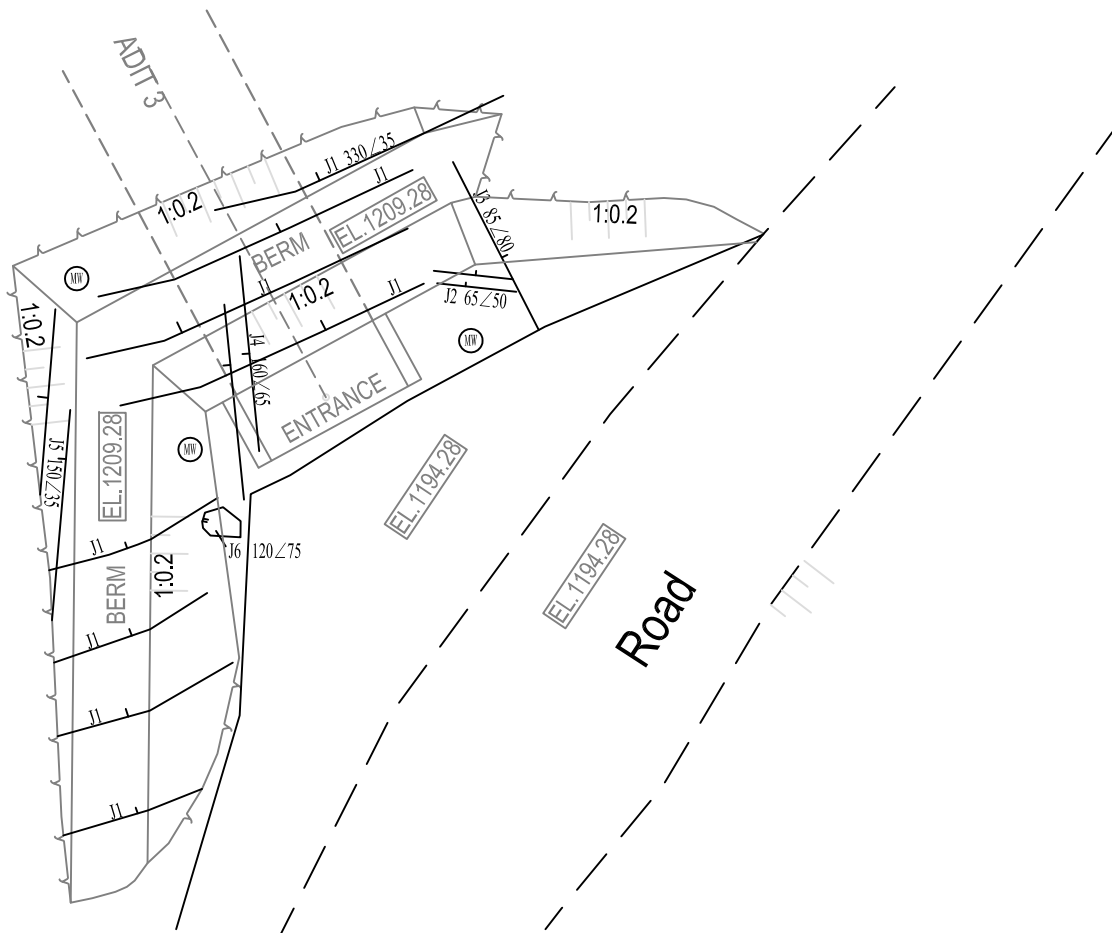


Geological mapping of slope at entrance of Adit NO.3

Scale 1:100



Legend

- Mi+Qu Sch Interbedded Mica Schist and Quartz-Schist
- III Moderately weathered
- J1 330/35 Joint number and attitude (Dip direction/Dip)

Summary of Geological Conditions

Slope Elevation	EL. 1194. 28-EL. 1209. 28
Rock types	Mi+Qu Sch
Rock hardness	Medium hard rock
Degree of weathered	Moderately weathered
Rock attitude (Dip direction/dip)	330° ∠35°
Rock mass classification	III
Groundwater situation	The slope surface is dry

STAKE	TUNNEL	ROCTYPEK	UCS	GROUND WATER	RQD	Jv	Jn	Jr	Ja	Jw	SRF	$Q=\frac{RQD\times J_r\times J_w}{J_n\times J_a\times SRF}$	ROCKMASS CLASS	DATE	
	DIRECTION	Mi+Qu Sch		GW1	70	13.6	6	4	3	1	2.5	6.2	III	2022.1.16	
NO.	Occurrence		SEPARATION (m)	JOINTS GROUP		PERSISTENCE	ROUGHNESS/ APPEARANCE	FILLING	WEATHER OF ROCK WALL	FAULT		UCS			
	Dip direction	Dip angle		SPACING	NUMBER					INFLUENCEDZONE (m)	NATURE	Very high		>250	
												High		100-250	
												medim high		50-100	
J1	330	35	C1	SP3	20	C3	R2	F4	W3			moderate		25-50	
J2	65	50	C1	SP2	5	C3	R2	F13	W3			Low		5-25	
J3	85	80	C3	SP1	3	C3	R2	F13	W3			Very low		1-5	
J4	160	65	C2	SP2	5	C3	R2	F3	W3			RQD%			
J5	150	35	C2	SP1	2	C3	R2	F13	W3			Excellent quality		90-100%	
J6(Plane)	120	75	C0			C2	R4					Good quality		75-90%	
	SEPARATION(APERATURE)		SPACING OF JOINTS		PERSISTENCE		ROUGHNESS/APPEARANCE		FILLING			Fair quality			50-75%
	C0:Very tight <0.1mm		SP1:VERY WIDE >2m		C1:Very Low <1m		R1:very rough surfaces		F1:rock sillar		F8: Breccia		Poor quality		25-50%
	C1:Tight 0.1-0.5mm		SP2:WIDE:0.6-2m		C2:Low 1-3m		R2:rough surfaces		F2:rock sliver		F9:Cataclasite		Very poor quality		<25%
	C2: open 0.5-2.5mm		SP3:200-600mm		C3:medium 3-10m		R3:slightly rough surfaces		F3:rock fragments		F10:Mylonite		GROUND WATER CONDITION		
	C3: open 2.5-10mm		SP4:60-200mm		C4:High 10-20m		R4:smooth surfaces		F4:rock powder		F11:Fault clay		GW1		Completely dry
	C4: Wide 10-30mm		SP5:<60mm		C5:Very high >20m		R5:slickensided surfaces		F5:Calcium film		F12:Sliced rock		GW2		Damp
	C5: Very wide >30mm				E0: Left wall		A1:planar		F6:Calcite vein		F13: argillized seam		GW3		Wet
	WEATHER OF ROCK WALL				E1: Top wall		A2:stepped		F7:Quartz vein		F14:clay course		GW4		Dripping
	W1:unweathered				W2:slightly weathered		A3:undulating		F15: weak intercalated layers siltized				GW5		Flowing
	W3:moderately weathered				W4:highly weathered		F16: Fractured zone								

NOTE

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0	20.JAN. 2022	FOR APPROVAL	CHEN G.J.	K.J.KIM	Y.S.SON
REV. NO.	DATE	DESCRIPTION	DRAWN	CHKD.	APPD.

PROJECT TITLE  
Upper Trishuli-1 HEP (216MW)

OWNER  


OWNER'S ENGINEER  


CONTRACTOR  
 Doosan Heavy Industries & Construction

DRAWING TITLE  
Geological map of slope at entrance of ADIT NO.3

INDEX	DRAWING NUMBER	SHEET NO.	REV. NO.
A	UT1-C-855-G-AD-3-01	1 OF 1	0